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ABSTRACT

The individualized developmental reading laboratory program described in this monograph was designed to supplement regular reading instruction in grades four and five. Information is provided on the instructional procedures used in the program, with emphasis on instruction given through teacher comments written in individual students' folders. Results of research studies examining the achievement of students in the program during 1975-76 and 1976-77 are also presented. A summary of the results reveals that students in the reading laboratory situation had gains significantly larger than the expected norm gains for the variables of comprehension and word study skills. (MKM)

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PROMOTING CONTINUOUS GROWTH IN READING ACHIEVEMENT IN UPPER ELEMENTARY SCHOOL STUDENTS

by

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with

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and

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Winter, 1978

Research Monograph No. 26

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Research conducted at P. K. Yonge Laboratory School results from cooperative efforts of teaching and resource faculty. The classroom teachers who participated in testing the model described in this monograph were John Banks, Barry Gottlieb, Jerry Hill, and Kathryn Watson. During the second year Barbara Kaiser served the project as reading laboratory director.

Ruth Duncan, Assistant Director for Research and Public School Services, and Stephen Sledjeski, Research Associate, assisted in designing the study and analyzing the data and in preparing this final report.

PREFACE

In 1970, the Florida State University System's four laboratory schools were directed to make research and development for the benefit of the State's public schools their central mission. Since that time, the University of Florida's P. K. Yonge Laboratory School has developed and tested no less than 56 experimental programs, published 29 research monographs, published related teachers' guides and student materials in 22 resource monographs, conducted no less than 400 workshops to assist interested teachers and administrators in the use of the Laboratory School's experimental programs to improve instruction in their own schools, and provided follow-up consultant services in response to requests from schools in which its experimental programs have been adopted. A unique feature of the P. K. Yonge Laboratory School's approach is that program development projects are conducted by teachers who also assume the responsibility of disseminating results.

Since the number one priority of Florida's public educational systems has been to improve reading, the P. K. Yonge Laboratory School has developed more programs in that area than any other. This monograph describes the School's fourth tested program in reading. Previous projects in the area have developed and tested an individualized reading program for the primary grades (Mendenhall, 1976); a guide for use by parents in helping their children learn to read (Siders, 1978); and an individualized, developmental reading program for middle and high school students (Guttinger, 1972 and 1977).

The middle and high school reading program has been the most successful of all P. K. Yonge programs, having been adopted by more than 150 schools. This monograph describes an adaptation for upper elementary grades of the middle and high school program. It is designed as a supplement to regular reading instruction in the classroom. Its advantage is that it provides specialized help without stigmatizing retarded readers by placement in remedial programs. A distinct advantage of the program is that modeling behaviors are provided by good readers at the same time that they advance to increasingly high levels of proficiency. All students received special instruction at no greater cost than would be incurred in providing remedial instruction for retarded readers.

In reading the manuscript, I was especially impressed at the quality of communications between the laboratory director and students as exhibited by notes in students' journals. Not only do students' comments reflect their perceptions of the director as a warm, supportive helper, but they show intense pride at being able to report their accomplishments. It is when such relationships between teacher and student exist that optimum learning is likely to occur.

The Laboratory School faculty are challenged and inspired by the enthusiastic response of the State's public school teachers and administrators to their efforts to contribute to the improvement of public elementary and secondary education. It is our hope that this study will prove useful. Readers who are interested in learning more details, with the possibility that they might like to establish similar programs in their schools, are invited to contact us concerning attendance at workshops to be conducted for that purpose.

J. B. Hodges, Director
P. K. Yonge Laboratory School
and Professor of Education

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INTRODUCTION:
BASIC BELIEFS AND VALUES UNDERLYING THE PROGRAM

A fundamental belief underlying the program described in this monograph was that reading skill development is an ongoing, continuous process; hence, each person's reading skills benefit from direct attention from time to time throughout life. Because of this belief, this reading program provided continuation of reading instruction through the elementary years. Specifically, the design focused all nine- and ten-year-old students in every fourth and fifth grade classroom on an intensive reading skill building experience. No child was "selected" to attend the program because he or she "needs help"; likewise, no child was exempted from participation because he or she "is already an excellent reader". Because an entire class attended the reading laboratory together, the stigma traditionally associated with participating in a special reading program to get special reading help was eliminated.

Closely associated with this belief and the related practice of having everyone participate in a reading improvement program is the belief that human beings grow and learn best in a non-threatening environment. Thus, while correct responses received positive reinforcement, mistakes were viewed as indicators of points of emphasis for practice, effort, process, attitude, and progress rather than cause for reprimand. Openness, caring, and mutual teacher-student trust were characteristic of the environment. Communication between student and teacher was essential to producing and maintaining a growth-stimulating atmosphere.

Each child is capable of gaining independence as a learner and profits more from self-direction than teacher-imposed instruction. Therefore, each student, although he or she attended the reading laboratory with an entire class, planned and carried out a reading improvement program. The program was individualized in the sense that it was designed to meet the unique goals and priorities selected by each boy or girl. The consequent feeling of "being in charge" and responsible for his or her own behavior and learning encouraged the development of independence. It follows then that, equipped with independent learning skills, the child is more likely to become a life-long learner, continuing to grow intellectually even after formal education is terminated.

In this program, there was no one reading laboratory director; conversely, there were as many directors as there were students, as each student was perceived and treated as an individual who best knows himself. Teachers related to students as consultants and guides, responding to questions and concerns, offering suggestions, providing needed information, teaching specific skills, rendering opinions, and lending a listening ear. One overriding assumption in this consultative process, however, was that the "consultee"--in this situation, the student--was always free to accept or reject the specific suggestions provided by the consultant. Similarly, although the teacher may have voiced an opinion or suggestion, both the teacher and the student understood clearly that the student was the ultimate decision-maker. Additionally, the teacher rendered positive reinforcement to the child not only for his efforts and progress in reading, but, more significantly, for his efforts in becoming a self-disciplined, independent learner.

... four classroom teachers

and ...

... a reading laboratory director.

PROMOTING CONTINUOUS GROWTH IN READING ACHIEVEMENT IN UPPER ELEMENTARY SCHOOL STUDENTS

In general, students make continuous progress in reading at an expected pace as they move through the primary years. However, numerous studies indicate that, beginning in the fourth grade, progress tends to decelerate, and the resulting gap between grade norms and mean achievement continues to increase throughout the middle and high school years. Furthermore, comparison over a four-year period of the entering reading achievement levels of groups of sixth graders enrolled at P. K. Yonge Laboratory School revealed that each year the group mean became lower (see Figures 1 and 2).

These findings led to an inference that, without intervention, existing gaps at middle and secondary levels would become even wider. Consequently, there was a need to investigate ways to begin reversing deceleration in reading growth among upper elementary pupils, thus closing the gap between existing performance and expected competency levels of students as they enter middle school. This project served as one attempt to meet that need.

THE STUDY

Purpose

The purpose of this study was to test the effects of a developmental, individualized reading laboratory with nine- and ten-year-old children. Specifically, the study was designed to cause elementary children's reading progress to continue to accelerate consistently, thus reversing the trend toward deceleration through the upper elementary grades.

Staff

The project was staffed with the four teachers of each of four self-contained upper elementary classrooms and a reading laboratory coordinator. Classroom teachers were all highly qualified by both training and experience in the area of elementary education; the reading laboratory coordinator was equally well qualified by both training and experience in using a developmental, individualized approach to reading improvement with middle and high school students as well as with adults.

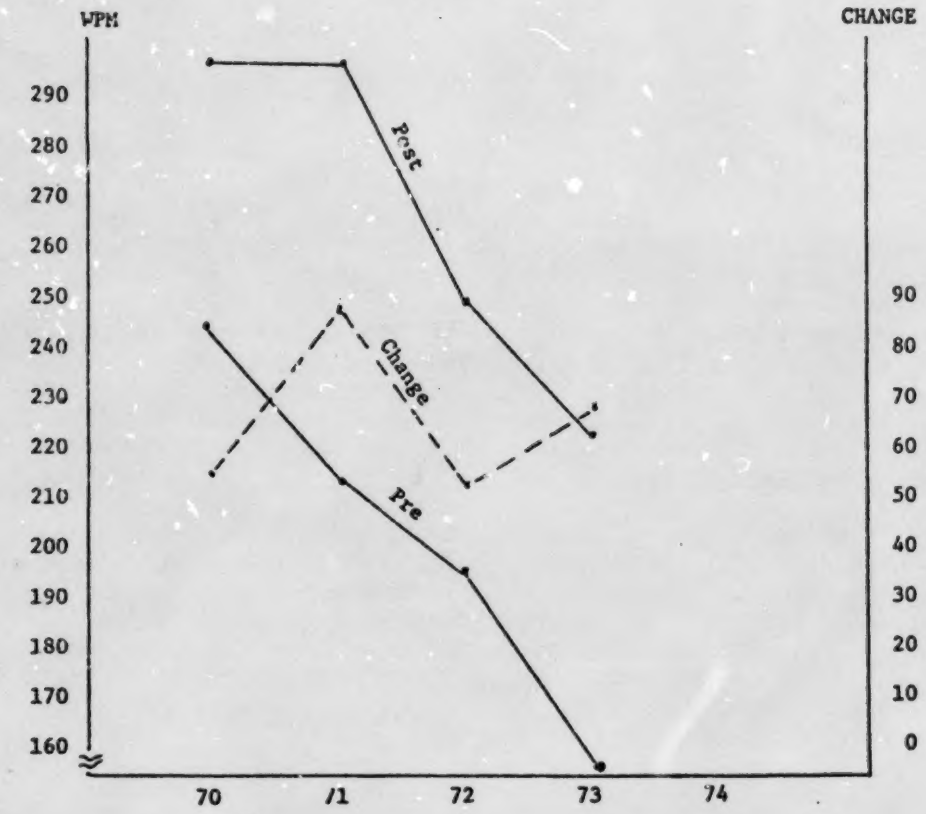


Fig. 1. Sixth Grade Reading Rate

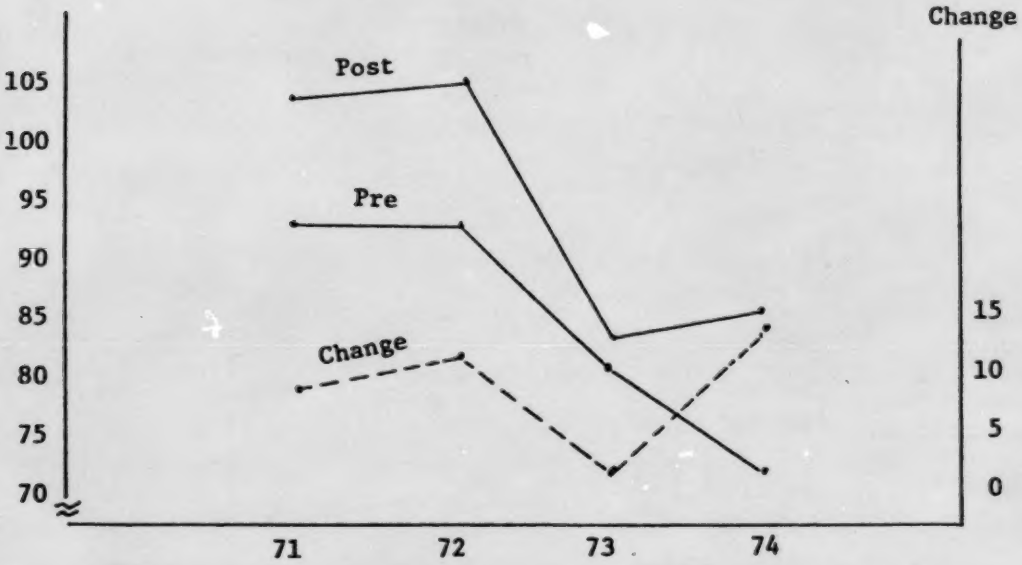


Fig. 2. Sixth Grade Total Comprehension and Vocabulary

Subjects

Each elementary classroom at P. K. Yonge Laboratory School consisted of a multi-aged group of children free of designation by grade level; i.e., fifth grade. Rather, each two consecutive ages of students, beginning with five-year-olds, were randomly distributed among four teachers, yielding: four classrooms of five- and six-year-olds, four classrooms of seven- and eight-year-olds, and four classrooms of nine- and ten-year-old students. All four classes of nine- and ten-year-old students participated as subjects in this study.

Because of the research responsibility of the School, selection and admissions policies are controlled by a procedure which insures that sex, socioeconomic, and racial characteristics for each total grade are approximately representative of the population of the State as a whole. That is, half of the students are male; half are female; twenty percent are black; and twenty percent are representative of each of five socioeconomic levels. Since the sample consisted of the total population of nine- and ten-year-old students enrolled at P. K. Yonge, the results of the study are considered to be highly generalizable to other nine- and ten-year-old students within the State of Florida.

Treatment

During both the 1975-1976 and 1976-1977 school years, classes of nine- and ten-year-old pupils participated as a unit in the reading laboratory. Activities in the reading laboratory were the same for each year.

The study during 1975-1976 compared scores of two classes of students who were exposed to the reading laboratory and two classes of students who had regular classroom instruction and no exposure to the laboratory. All four classes were randomly assigned. Both sets of classes were pre- and posttested over a nine-week interval. The students in the reading laboratory group attended the laboratory daily for 45 minutes.

All four classes of nine- and ten-year-olds attended the reading laboratory during the 1976-1977 study. The extent of reading laboratory contact time was varied among the four classes both in terms of number of weeks of treatment and number of sessions per week. The four classes were randomly assigned to the different treatment schedules. A 45-minute laboratory period was the only constant in relation to the time allocated for the treatment among the four classes. Across the different schedules, however, the laboratory treatment remained the same. In essence, then, all classes of students, during the 1976-1977 session, received differing amounts of a similar treatment.

The different time-schedules were as follows:

Class A received treatment one which met five times per week for six weeks.

Class B received treatment two which met three times per week for six weeks.

Class C received treatment three which met three times per week for twelve weeks.

Class D received treatment four which met three times per week for two different six-week sessions separated by nine weeks of no reading laboratory treatment.

All students were tested before and after the laboratory treatment. Gain scores were determined for each class. These scores were compared with national norms to determine if the growth exhibited by these experimental students was significantly different from that which is expected of the general fourth and fifth grade population. Comparisons of gains were made among the four classes to determine if any differences existed as a result of amount of time spent in the reading laboratory.

Reading Laboratory Procedures

For all classes, the first two weeks of the program involved an orientation to the total laboratory experience, pretesting, and individual preconferences. Similarly, the final week for each class involved posttesting and individual postconferences. The intermittent weeks constituted the period of time during which each class participated in the reading laboratory.

Orientation to the Reading Laboratory

All the activities and procedures of the reading laboratory program were preceded by a general orientation designed to serve three major purposes:

1. to introduce the students to the reading laboratory by presenting them an overview stressing purpose, continuity, and integration of the various components and processes of the laboratory experience;

2. to help students to recognize the academic nature of the developmental approach to reading improvement; and

3. to cause students to look forward to the experience as one appropriate for students of all ages, abilities, and achievement levels.

Initially, with the aid of a slide presentation, the reading laboratory coordinator gave the children an overview of the various components and processes of the program, including the pre- and post-testing, the initial conference, goal setting, folder writing, reading laboratory activities, and the postconference. The rationale for each of these components was shared with the students to assist their acceptance of each process as they experienced it.

During the presentation, the developmental nature of the program was stressed. The concept was further extended and reinforced through slides which picture elementary, middle, and high school students as well as classroom teachers working on their own individualized reading programs in the laboratory.

The second step of the orientation process introduced children to the reading laboratory materials. On each of several different occasions before starting the reading program, children were taken to the laboratory to learn about two or three materials at a time. For this activity, students were divided into three groups of approximately ten each and rotated through stations. At each station one or two materials or kits were demonstrated and children were assisted in trying the materials and in using the corresponding worksheets. This "hands on" introduction facilitated students' entry into the reading laboratory by reducing some of the unknowns. Having even minimal knowledge of the mechanics and the materials minimizes the risk of student frustration during initial weeks and maximizes the opportunity for the first and continuing positive impression of the reading laboratory.

Testing

The children were administered standardized tests both before and after their reading laboratory experience. The scores from these tests provided information for diagnosis and prescription and for determining both the growth of each individual student and the effectiveness of the program in general. The particular instruments used for this project were the Stanford Diagnostic Reading Test (SDRT), the Reading Section of the Stanford Achievement Test (SAT), and the Rate and Story Comprehension sections of the Diagnostic Reading Test (DRT).

The SDRT was the measurement instrument used during the 1975-1976 study. The instrument is designed for use in the early part of some instructional program. A general assumption of the contents of the test is that it is first necessary to find out what learning problems a pupil has in order to then improve competence in a certain area. It is concerned with intensiveness of coverage.

Levels I and II were administered to students based upon ability as judged by the classroom teacher and the reading laboratory director. Level I is intended for use from the latter part of Grade 2 to the middle of Grade 4. Level II is intended for use from the latter part of Grade 4 to the middle of Grade 8.

The instruments used for the 1976-1977 study were the SAT and DRT. Using the SAT has a number of advantages in an individualized program such as that described in this monograph. One major advantage is that the test is available in sequential levels. Because of the wide range of achievement represented by students in most classes, it is frequently difficult to obtain an adequate measure for each student by administering the same test to an entire class. Some students "top out" while others are unable to score at all. In either case, the scores obtained will not yield information regarding the student's acquired skills that is sufficiently accurate for prescribing a diagnostically based individualized program. Furthermore, the child who "ceilings out" of a pretest, regardless of any possible degree of improvement will simply not demonstrate growth on a posttest of the same difficulty level. On the other hand, it is possible for a child whose achievement level is far below that which a test measures to make adequate yet undetected progress if his newly acquired skill level is still not within the measuring capability of the instrument. Consequently, three different levels of the SAT (Primary III, Intermediate I, and Intermediate II) were employed in this study in an attempt to individualize evaluation as well as instruction.

In addition to providing assessment at multi-levels of scaled scores provided in each manual, comparisons among the different levels of the test are possible. Therefore, even if several different levels are administered, the scores can still be combined for group data analysis.

Different levels of the SAT were assigned to students according to their scores on informal measures made by the classroom teacher. Children were administered the SAT in three different groups, according to the designated test level.

All students were administered the same level of the DRT in one large group. The DRT was selected as the instrument to measure rate because of the particular format it employs. Whereas many tests measure rate by having the students read and answer questions simultaneously, in the DRT format the student's rate is determined solely on a timed reading passage, and then related comprehension questions follow. Consequently, the reading rate obtained for each student is a more precise measure of rate in that it is not influenced by the student's ability to answer questions.

For both years, after the testing was completed and the tests were scored, the raw scores were recorded on a cumulative data sheet. Separate scores were entered for each of the subscales on the pretest. In addition, space was provided for the future recording of their corresponding posttest scores and the difference figures. Thus, a format was begun to facilitate data analysis for final accountability. The raw test scores were entered on a profile sheet in a folder prepared ahead of time for each student. The scores were also shown graphically as stanines or percentiles (see Appendix A). No grade level equivalents were indicated; rather, students were normed with their own age group and not compared with other children above or below their grade level.

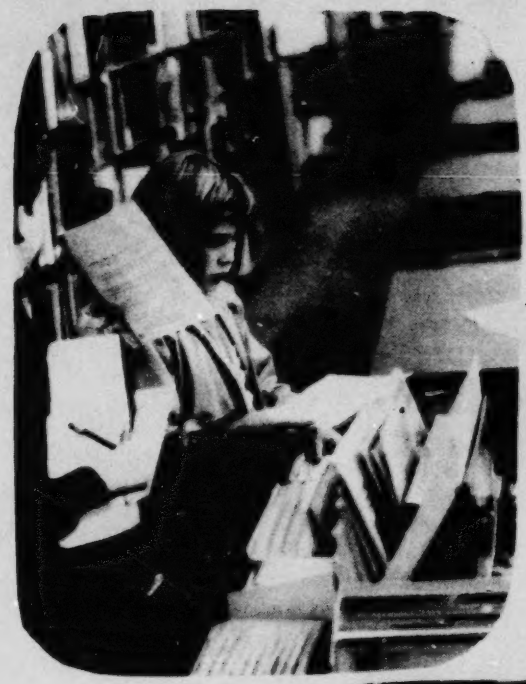
Preconferences

Following testing and before classes began work in the reading laboratory, each child had an individual conference--ranging in duration from 20 to 40 minutes--with the reading laboratory teacher. This conference, daily folder writing, and interpersonal interaction in the laboratory were considered essential components of the program.

Since the reading laboratory teacher, unlike the classroom teacher, usually had experienced little or no prior personal interaction with each student, the preconference provided both the initial and generally the longest single period of one-to-one contact she had with a student. Therefore, one of the major objectives of the conference was to establish an inviting and non-threatening learning environment characterized by mutual trust and respect. Thus, the channel was cleared for open communication which continued throughout the laboratory experience.

Even though program planning was a major objective of the preconference, the teacher did not enter the meeting with any preconceived ideas about the exact nature of the program the student was to pursue. The teacher remained open, allowing all students to develop personalized programs which incorporated only those skills and activities which seemed important to that student as an individual. Beginning

The Reading Laboratory is housed in the library.



with the conference and continuing throughout the laboratory experience, the teacher encouraged the student to determine his or her own priorities for self-improvement in reading, and, as such, endorsed his role as director of his own reading program. It is during this conference, therefore, that the student initially became aware that the primary responsibility for both reading growth and the focus of the individualized reading program were his.

The teacher, however, offered and supplied any information she felt would add to the student's knowledge of the reading process and aided him or her in developing and creating an adequate and rewarding program. To guide his efforts in the laboratory, the teacher assisted the child in clarifying and establishing goals which were both realistic and personally meaningful. In short, the teacher acted merely as a guide and consultant, aiding each student in defining and specifying his or her goals in preparing a personal program for reading development. The teacher's regard for the child as a unique and responsible individual, fully capable of making personally valid decisions, was reflected in this freedom of choice afforded the student in the goal-setting and program-planning process.

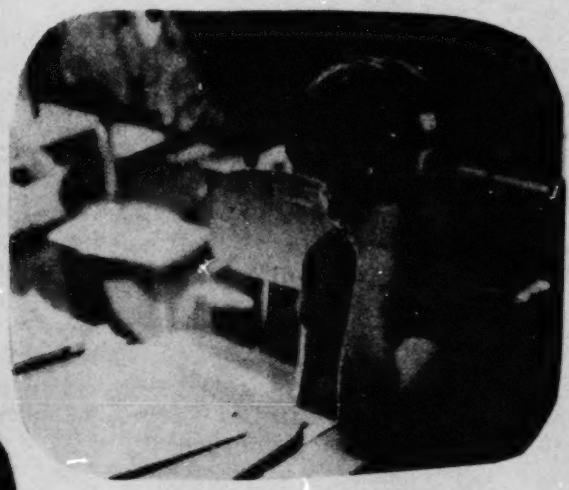
To provide students with additional information for decision-making, the teacher interpreted the scores from the pretest for each child. Only the objective meaning of the scores was communicated to the student by the teacher; thus, evaluation of the test scores was left to the student. Because any two students' reactions to the same test score are very different, depending upon their varied experiences, achievements, and expectations, it was considered highly important in this test interpretation to listen to the student's subjective evaluation of the scores rather than offer an evaluation colored by another's system of values. Also, because it is possible for a number of factors to influence any particular test score, each child's personal validation of his test results was encouraged and considered equally as meaningful as the test scores themselves.

When a child expressed displeasure with any or all of his or her scores, every effort was made to listen to his or her verbalization in exploring such feelings and to accept these as real and legitimate concerns. At the same time, the teacher assured the child that any desired changes were within his or her control. The child's acceptance of the fact that the ability to read is an acquired skill rather than an inherent, unchangeable, native ability was an essential prerequisite to personal commitment to learn and for realistic expectations regarding his or her own reading improvement.

In the reading laboratory

The reading laboratory, which at P. K. Yonge Laboratory School is housed in the library, contains a variety of materials (see Appendix) with which children may work to pursue their personal goals in reading.

The program tries to accommodate the learning styles and personal work preferences of all students.



Some children prefer working with a classmate or in small groups.

I had so much
Fun working wiht
C.r. can I have
Someone to work
with monday like
me and Devin.

Mon. 12/15 Caryn - Yes, you may work with Devin on C.R. today. Have a good day. Mary

I Like workin witec.r.

Others prefer working alone.

I had a very nice
day in R.I. Readers Digest
is my favorate things in
R.I. I espeicly enjoy that
you work alone instead
of with other people
Bye
P.S. I'm a Pisces
Love
Angie

Teachers may offer opinions and suggestions, but throughout the laboratory experience, self-choice, self-direction, and self-responsibility are emphasized.

I hope I may do R.F.U. and Clues and Readers Digest.

Sibylle - If you do all that ↑ in one day, you will be accomplishing miracles! Try RFU and Reader's Digest today. And finish Reader's Digest on Tuesday 5/6. I think Clues may be too easy for you. But if you want to try it on Wed. you may.
Mary

I finished the Whole Rfu kit and I

did the Readers digest! Did I Make a Miracle?

The materials cover not only a wide variety of skills, but also a wide range in terms of levels. Furthermore, in order to accommodate the particular learning styles and preferences of individual students, a variety of types of materials are available, ranging from those which are primarily workbook-type to those which require listening or viewing or a combination.

As was noted earlier, an entire class of 30 children attended the laboratory at the same time. As a child entered, he or she first picked up his folder, read his or her notes, found his or her materials and a work shop, and completed his or her assignment(s). Children were responsible for checking their own work. Each kit or activity had a self-checking device which was available to all students at any time, a means by which the teachers communicated trust in each student.

Some children prefer to work alone whereas others prefer to work with a friend or in a small group. Allowances were made for such differences in recognition of the importance to each child of having the opportunity to work toward those personal goals he deemed desirable and in the manner in which he worked best.

Also, during the laboratory period, children were encouraged to be helpers to one another. Once a child had learned the mechanics of a particular activity, he was then expected to be a teacher to other children who might choose to employ that same activity. This helping relationship, fostered in the reading laboratory program, was frequently particularly important for those students who, although reading at a level below which they might desire, were nevertheless able to be qualified helpers to their more accomplished classmates.

Once the children had learned their way around the laboratory, the teachers (classroom and laboratory) had more time to work more intensely with individuals or groups of students on their chosen materials. Again, however, in order to avoid any stigma, and, more importantly, in order to be fair to all students, teachers spent time helping children of all levels of accomplishment. If a child indicated in some way that a teacher's help was not desired, this too was respected.

While the reading laboratory experience was primarily a time for intensive practice on isolated skills, free reading was also a choice and strongly encouraged. Among other purposes, the free reading component of the laboratory served to reinforce the idea that reading skills development is not an end in itself, but a means to explore and enjoy the world through the written word. A paperback library was available to the students through the reading laboratory. Additionally, students were free to check out books from the main library at any time. At the close of each laboratory period each child replaced his materials, wrote a comment to the teacher in his or her folder, and left it in a stack with the rest of the folders for the class.

Free reading of any book is built into the reading laboratory program.

I had for today
I would like to
free read again
tomarow the
book I started
was What is that alligator
saying
Gillion

Folder writing

Before a class attended the laboratory, a folder containing a profile sheet, a materials list, and a comment sheet was prepared for each child. Any answer sheets related to the materials which the student was to use (as determined during the preconference) were included. Once a class began work in the reading laboratory, a personal contact with each child was continuously strengthened and maintained through an exchange of written comments in the individual folder.

This "dialogue" served to develop and enhance the caring and trusting relationship, begun in the preconference, between the student and teacher. The folder writing process was considered extremely important in promoting the positive affective quality to which the success of the program was largely attributed.

Before the first reading laboratory period, this dialogue was initiated by the teacher by a personal comment written in the student's folder. This initial note typically consisted of a welcome, and assignment, and a personal comment related to the discussion during the preconference. Throughout the remainder of the laboratory experience, a teacher's note generally consisted of an assignment, a personal response to whatever question or comment the particular child may have written, and frequently, reinforcement for what the child had accomplished. Regarding the assignment, whereas the general goals were chosen by the student during the preconference, and specific materials may or may not have been designated at that time, the teacher used the comment sheet to guide the student into the appropriate levels of specific materials.

In addition to being a vehicle for suggesting assignments and building a relationship, the folder-writing correspondence served a variety of functions for both the student and the teacher. The following pages, consisting of excerpts from the folders of several children, illustrate some of the purposes that can be facilitated through folder-writing.

DATE	TEACHER COMMENT	STUDENT COMMENT
—	Hi Lee – Welcome to reading lab. I hope your first day is a good one for you. I really enjoyed talking with you last week & am glad to know you're excited about lab. Start with 6-ways today. Let me know if I can be of any help, Mary	it's more fun than I thought it would be six-way paragraph is hard! now that I understand its a bit easy I disagred with some of the answrs in six-way paragraph
—	Lee – I'm delighted to hear that! You sure got a lot of work done in 6-ways. Do two more units today. Good luck! M.	O.K.
	Lee – Keep up the good work in 6-ways M Lee –	
	Let's talk about the ones you disagree with. Maybe together we can make some sense out of them. OK? Mary	I think I understand better I'm glad – you sure do catch on quickly. If you want to discuss any more of them please let me know. I'll be in 6-ways today – M. Mary

Students express excitement about conquering a difficult activity.

I think that gh had too Much vocabulary but it's OK

Derrick

I'm getting to like gh More than FF. Derrick

PS. I cant belive I Did the Whole thing! BZZZZZZ Boo! Surised?, Beep Beep this is a Film. Smile your On. Ffc OOPS a Blow our poof Bangsz

Derrick -

GH certainly does have a lot more vocab. than FF. I bet the words are harder too! You sure did a great job on GH-7. 9 is super. I think you are turning into a rate monster.

Keep up the great work

Mary

It's important for children to accept that success doesn't always come on the first try.

I think I did better on six-waks this time and it didnt seem so hard. Tommorrow can I do controll reader or something like that. Dena

Sure Dena,
You can do C.R. today, your 6 ways look good. It <u>is</u> a hard material and sometimes takes a while to get the "swing of it."
Have fun in C.R!
Mary
P.S. I missed you on Friday. Have a Nice Holiday.

I got 4 right today but yor know what they say try try try agin. Today I am Happy becouse I got to do 1.

..How do you acknowledge and praise a beautiful effort and at the same time help a child grow?

I really enjoyed the book I did. It was uneek.

Geleta

Geleta - I'm glad you thought that book was good! I'm quite impressed with your new word, too! I know uneek sounds like you spelled it - but it is spelled unique (Believe it or not!!) Some words in our language sure have funny spellings, huh!

Well, today is your last day in lab. I hope you have enjoyed & grown from it. You have certainly worked hard.

I am going to miss you.

Mary

Incorporating new words in the folder notes is an excellent way to teach and reinforce vocabulary development. These may be words from a student's lesson, or any words the teacher may choose to introduce. Besides affording the student practice with newly learned words, this method is fun for both student and teacher.

I tried to work perseverengly (hard) today, & hope to contine (steadfast) going over the most hardest words were fun I need another comment

Geleta –
Let's go over your new words together today.
Mary

Geleta, I have an abundance of comment sheets so here is a new one for you. I hope we have nice weather today & not inclement weather like yesterday.
You sure did a commendable job on your vocab.
Let's go over more words today.
Mary

My goodness, Geleta! You are quite a diligent worker. I'm sure you were quite perseverant yesterday. You have certainly done a commendable job! I'm really proud of you! A job well done!
Mary

Children relate a feeling of pride in their efforts and accomplishments.

Hans -

Well, I'm pleased to know you are moving up in the world. forty-five is really good. Woweeee Do another one today. do 50. Let's see what happens. Do you know what diligent means? (If not, find out & use it in your note back to me today). Adios!

maria

Had Great fu. Moved up in the World Speed 45 Yiepy.

See you tommoro Glad to be back.

zzzzzzZZZZZZ

I had fun today and I can need all the woods

Gillian

I had a lot of fun with it today you should se wat I did compard to the last time I did picTo caB I would like to do itagin nechst time Chris

Chris - I saw what you did in PICTOCAB ON THURSDAY I can't believe how many units you did! And you SURE got a LOT of them RIGHT. You must have worked super hard to do ALL THAT. I feel like you are developing some real good + mature WORK HABITS.

Do your PICTOCAB AGAIN today. Have a good day!! Mary

I enjoyed this very very much I hope to do a lots tomorrow I had a lot of fun today. I am proud of myself. tomorrow I think I will do a little better. It was a lot of fun.

I had alot lot of fun todays. I moved up to section 4

Teachers can reinforce learning habits and skills not directly related to the reading process.

While specific skill development is a major purpose of the reading laboratory program, an overriding goal is to help children appreciate proficiency in reading as a means to achieve a broader participation in the world in which they live. Learning through reading becomes a purpose of learning to read. Exploring with children the stories they have read with particular emphasis on the affective dimensions of the story and the personal meaning and value they have extracted from it is one way of helping students develop this appreciation.

Reader's digest was the story I'd read really the first made me want to cry It was fun

Why did it make you want to cry? Please tell me about it. OK?
Mary

I Liked the Story of the Black Boy and White girl.
Terrie

Terri - I'm glad you liked the story. I'd like to hear about it & find out what you liked & learned. Can we talk today? mary

Mary - my story is on Page 58 Blue Readers Digest. —
TERRI

Terri - Your story sounded so good. You sure remembered a lot of it, too. I would like to read it myself if you'd tell me where to locate it.
Thanks!
Mary

In addition to being pleased with progress, it is important that a child develop confidence in his general approach to a learning situation.

2/2 I got 7 right but I dont want to go up. I did I the hole thing today. I like Reading lab

I changed my mind
I want to go up
I think I can
I am having fun

Hans —

OK - You stay where you are until you feel like moving up. I am really glad you like r.L. I missed you when you were gone. Glad you're back.

OK Hans —

If you think you can, I bet you can! Good Luck. I'll keep my fingers crossed.

Mary

Yeipy I am up to 350 words per minit. have a nice day. Hans HeHe

Have a nice day

350 Yepi

Hans -

I am as proud of you as I can be. You have really moved up AND you have taken your time to do it. It is very important to work at a certain rate until you really have it mastered. It's not always helpful to move up too fast. I'm sure your new reading rate will really stay with you. You are a very hard worker. You could have moved up after FA-5 but you chose to stay at 300 for a while. That was a very "mature" thing to do. I am so pleased with your sense of "judgement" (If you don't know what that means, please ask me and I will tell you.)

Hans, you are a really neat person! XXX OOO Mary

Sometimes finding the right materials and developing a good program for each student takes time and revisions. It is important to maintain flexibility in program planning throughout the laboratory experience.

I like CR. very much I would like to do it more often! Now I like Lab more then anyone else. At the first or the year I didn't like it at all but now things have changed I love it! Love Terri

Terri -

I am very very excited to hear that you like LAB so much. What do you think makes it more fun and better for you now? I would really like to know. !!!!!

Have a good day!

Mary

5/5 1985 Terri Barbara

Well I really am having fun with CR. I think it's really going to help me! Well I guess I'll go Love Terri

Id Like to Start C.T. tomorow

a Reminder

Ben- Start C.R. today. Use the EE book and start at Rate 55. Good luck! I hope you like it Mary

I liked C.T. it Was Fun but I only got a 6 on it!

You were right about it's hard at first because I did better this time I,l see you next month or maybe tomorrow

well I guess that at 275 I always get 6 See You next Year

Well I'm hope 76 is going to Be a good Reading Lab Year

Teachers can help children pace themselves through the learning process.

Mon 12-5 Ben, It sounds like your a little disoppointed, but your first time on C.R. is often hard. Do another one today at 250. Good luck.
Mary

Wed 12-15 Ben - I'm glad you did better. It often takes a little practice. Do C.R. again today + move your rate up. Have a wonderful holiday! see you in 76. Mary

Mon 1-5 Ben- Welcome back! You won't always get 6 at 275. Keep working at it. These things take time!
see me before you read your filmstrip today.
Mary

1-6 Ben - I also hope 76 will be a good reading lab year. Do C.R. again today.
Mary

this time on C.R.
I got 9 Right
and 1 Wrong
I was Right about 76 Being a good
I Didn't Beleave Year for
I Could Do this good I got a 9 and C.R.
a 8

Wed 1/21

Ben - You are doing a super duper job! Keep up the great work This is certainly your year! Mary

It looks like I'm going up and down in presentige

Thurs 1/22

Ben - The higher you go the harder it gets - Don't worry - just keep at it. You're doing fine. Really! Mary

OK, I'LL Stay on 390 For a While

1/23 Ben- Do 390 again today. You have moved up quickly + it would probably help to practice at 390 for a while.

Have a fun weekend!
I did 390 again and I got an 8 Mary

OK

I got 7 tooay
isint that Fantastic
Ha Ha Ha Ha Ha I fooled you
it Wasent Fantastic
it Was great
couse your on
Candid Camroa
I dident Beleive I
could Keep getin
7's at 390

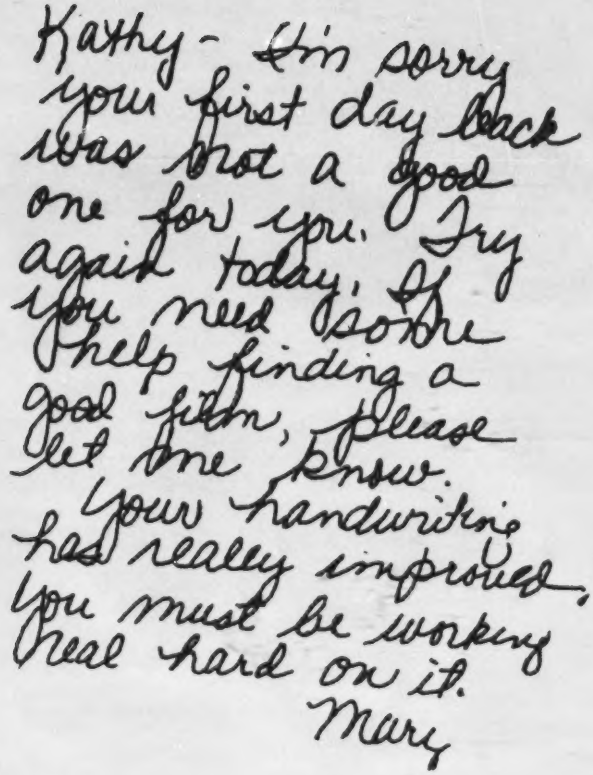
1-26
Ben
8 at 390 is terrific! Do 390 one more time & then move up. You must be really excited about your progress. I am!

mary

Through folder writing, the teacher has the opportunity to support the child's efforts in oral reading.

DATE	TEACHER COMMENT
Wed. 1/28	Gleta - I would love to have you read out loud to me again today. You did a Beautiful job yesterday. Even with those hard words. Your MP's look super! Sometime I'd like to hear more of your poetry, too. Mary
M.P.	

Handwriting skills can be reinforced through the teacher's comments in the folder.



Spelling is another skill which can be developed through folder writing.

Mary
Iam trying to DO
all of Level 3
Marcia

Mary
We need a New
Pecie of Papper. I Do
not know How to
SPELl Pecie, ▽
Marcia

2/23 Marcia –

You were close,
you just had the
"i" in the wrong
place – Piece

You don't have to do
all of section 3, but you
can if you want to.
Mary

Word parts, as well as whole words, can be taught through the daily comments and reinforced through interaction with the child in class.

Bruce-

Work on Clues again today. How are you liking it? Do you know what "tion" sounds like? What is this word

ACTION

Writing folder notes provides the teacher an opportunity to praise and reinforce children for numerous other skills which may be valuable to the maturing learner.

Readers Digest was very enjoyable today. Thanks for starting me on it.

Well - You are most welcomed, Gleta, You sure do have some excellent work habits. Continue with R.D. today. Mary

Such as work habits...

Angie - You are really a hard worker! You did such a nice job yesterday. You follow directions very nicely. Finish your story in Reader's Digest today + then start 6 ways. Mary

... or a good job of following directions...

Mon. 10/29 -

Hayley - Why don't you try 6-way Paragraphs today. I think you might like that. See me & I'll show you how to do it. Thank you for always putting your things away. You're a real Help! Mary

... or demonstrating responsibility of self-direction.

Today was fun

David - I am really pleased with the way you used your time on Thurs. I feel that it was a very responsible and mature choice for you to fill your last few minutes with a reading activity even when you weren't assigned something. Good for you! C.R. and Rate Builders are both looking great!

Today, do man power + 6-way paragraphs.

Mary

STUDENT COMMENT
Today I did C.R. and R.B. I did R.B. because
I had some time left over to do one R.B. David

Folder correspondence helps the teacher identify and consequently be able to deal with various situations which may hinder a child's progress in the reading program. Since children's notes are read and responded to on a daily basis, most nonproductive situations can be arrested and reversed almost immediately.

Today I had som bad promplems I think I need to talk about it.

I had a fantastic day.

---

today I had a good time.

Today was great

Charles - How many did you get right on EE(5)Y4? The last page of the book will tell you the answers. Let me and I will show you how to make your graph. mary

---

Hi Charles! Welcome to reading lab. I hope your first day turns out to be a good one. Mary

---

Oh Charles, Let's talk about it today. Come + see me, ok? Maybe we can work it out. Mary

---

Charles - I'm glad reading lab is going well for you. Continue with Controlled Reader today. Mary

Children can express their feelings about making progress or reaching their goals through folder writing in addition to their personal interaction with the teachers during the laboratory period.

My Day
was great because
I have did one of my
SRa and It makes me
fill happy
love Rene

I did very good
on that and I
think I am doing
very good and I
like it I got
than all right two
tim—
I love you

mary I got 5 Right
I am so Proud
Terri

mary, 5 Right again
I thought I had 4
Right, But I had 5
I am so happy I got
Love Terri!

Terri -
Congratulations! You
should be very proud
I am proud of you, too
Try another one today
and keep your Rate
at 15. Good Luck!
mary

Folder writing gives children the opportunity to express their feelings about many things -- the reading laboratory in general, specific materials, their progress -- and most importantly feelings about self.

Mary I am really happy about O.R. I jumped all the way up. I am super happy. Bye!
Terri S.

Mon. 11/10 Terri - I sure can understand why you are so happy! 9 right at 250 is fantastic! Try one more today at 250. OK? Mary

To day I feel like i am doing beter

John-
I'm glad to hear that you felt good about your work on Tuesday. You did a very nice job. Work on RFU and Rate Builders again today. Keep up the good work. Mary

I enjoy doing Wordcraft!

Wordcraft Halps me

Although reaching personal goals may take time, children often express, in their folders and directly to the teacher, great pride in their accomplishments.

mary

NEXT TIME I will
Be at My GOAL

stephen

Stephen -

Well, you are really moving right along on LR. If I could read as fast as you, I'd enter the OLympics!

Keep it up!

mary

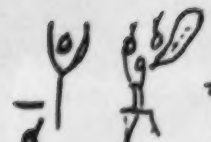
I all most
made it (2/1)

stephen

Well - you almost did. Maybe today will be your day!

Good Luck!

mary



I did it
I got my a Goal
I had a Stephen
Nice Time

2/12 Ya Hoo!!
Hooray! Fantastic
and many
Hats off to
you, Stephen!
That is just
Super! What do
you want to
do now?
Mary

I reach my goal!
I am so happy!
I Can't belive it!
I got 1 wrong at Rat
90. I love CR I want
to do C.R next time to
Please?

Maria - You are
something Else!
450 words per minute
and ~~stidt~~ still going
strong! By all means,
do another CR today.
Why don't you try the
F book again (if
you want?). Good luck
with 95! Mary

mary Today
I struck my
Goal in C.R.
Robert

By writing notes in folders, the children can, in their role as director of their reading program, tell the teacher what specific materials they would like to use....

Mary I whoold like to keep Doing wate I am Doing

OK Caryn - Continue with what you did yesterday. Mary

We are rilly getting on wit are comments!
And I would like to do C.R. Tomorow.
P.S.
I hope I can do CR Tomorrow
To
Douglas

OK Douglas - You may do CR. today. You really seem to be liking C.R. + you're doing a super job on it, too! Mary

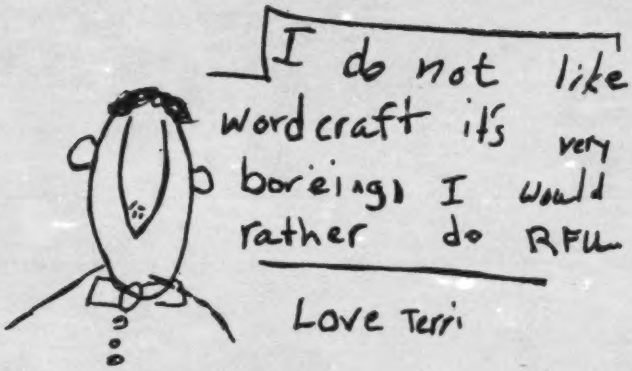
Douglas, You may do C.R. until you get tired of it or burn out the machine! You did great in FF and — 130 is Super
mary

I would like To Do CR Tomorrow O.K. And I would like To Stay at 130 All tomorrow. And I would like to do CR all this week
Douglas

Ok Douglas - Whatever you say is what we will do. You did a nice job on 130 yesterday.
mary

... or not use.

I don want to do this no more !



55

Even when children do not express a definite preference regarding their program, the teacher helps stimulate their thinking so that a choice can be made by each student.

What Do
you want
me to Start
in on Monday?
????

Tues: 2/10
Well, Marcia - Let's
talk about that
and see what
would be interisting
for you. OK?
Mary.

P.S. I really like you!
XXX
OOC

Belief in each child's ability to make effective decisions regarding his reading program is communicated through folder writing.

TEACHER COMMENT	STUDENT COMMENT
Ok Robert - You're the boss! ck + 6-ways it will be. Those are both very good materials & think you've made a wise selection. Have a nice weekend. Mary	mary I would like to stick with C.R. and six-ways. Robert

I think I'd better stay at 300 because half of the questions I was just guessing
Jon

Jan - If you think you need to stay at 300 - that's OK. However - you really did super for "just guessing" half the time! Before you read your new story review #11 at 350. Then drop back to 300 for your new one. Did you try that yesterday? How did it go?
Mary

Mark
I read at 300 again and got a right. Afterwards I read the Mysterious island but I didn't finish it. Jon

Postconferences

Following posttesting, an individual conference, lasting for fifteen or twenty minutes, was again held with each child. The incorporation of the postconference into the program allowed a private time for the teacher to share posttest scores with each student, to reflect with each child on his experience in the laboratory, and, most importantly, to explore with each child alternatives for continued self-development in reading. Although the postconference signified the end of the reading laboratory experience, it simultaneously reinforced the concept of development in reading as a self-directed and continuous process of growth. As such, then, the postconference served to reinforce the principle that reading development is an ongoing process of diverse self-directed activities throughout the total life of each person.

Following is an excerpt from a taped postconference with a fifth grade boy, demonstrating the technique of interacting in postconferencing. The transcription begins after the teacher has interpreted the test scores for the student.

Student: *Wow--I really got faster--242--That's really fast, and I started at 156.*

Teacher: *It sure is!*

Student: *I bet I could get even higher than that.*

Teacher: *I bet you could too. You sound like you'd really like to read even faster.*

Student: *Well, I would--and I'm going to try, too.*

Teacher: *How are you going to try? What kind of things will you do?*

Student: *Well, I'll just force myself to read faster-I'll push my eyes faster and faster and faster.*

Teacher: *That sounds good. You know what else you could try if you wanted?*

Student: *What?*

Teacher: *If you wanted to know just how fast you were reading and if you wanted to keep track of your gains--you could try this--Does your Mom have a kitchen timer?*

Student: *Uh huh.*

Teacher: *Well, you could set it for, let's say, five minutes while you're reading some book. When the bell rings, count up the number of words you read in the five minutes--then, if you divide by 5, you'd know how many you read in one minute, like we know now from your chart on the Controlled Reader.*

Student: *Yeah--I get it. And if I kept doing that I'd know when I get faster.*

Sharing scores

Children's posttest scores were recorded on their profile sheets in their folders. Entries were graphed in a color different from the pretest scores so that children could easily distinguish the two. As in preconferencing, the teacher interpreted the meaning of the scores either in terms of stanines or percentiles. Comparisons, then, were drawn between pre- and posttest scores, enabling children to see and appreciate any growth they may have made. Children were guided in reflecting upon their efforts and practices in the reading laboratory, thus endorsing their feelings of control over and responsibility for their own growth.

In some instances, however, children did not demonstrate growth on particular subtests, or more rarely, on the entire test. These situations warranted particular sensitivity during the postconference, especially if the child expressed feelings of disappointment.

Often times, reasons underlying a child's failure to demonstrate gains were quite logical. The most obvious and probably most easily understood and accepted explanation was that the student chose not to spend his time working on the particular skill in question. Helping a child recall and identify the particular skill areas in which he concentrated most of his practice helped promote insight into and acceptance of the test scores.

In some instances, however, a student, although having practiced diligently on a particular skill, nevertheless failed to demonstrate growth as measured by the posttest. Although generally less readily recognized or understood by the student, logical explanations for lack of progress were explored with the student.

Among the most common possibilities were that: (1) because of regression effects of testing, some students dropped in scores; (2) occasionally, the posttesting situation was less than ideal; (3) at times, the student did not feel up to par on that particular test day; or (4) sometimes, the student errored in recording answers.

Another important factor is that accurate measurement of growth is more difficult to obtain for some students than for others simply because of the nature of the different reading skills. Some skills (i.e., rate and comprehension) involve the acquisition of a process which is more easily transferred to new situations and contents than other skills (i.e., vocabulary and sounds) which are more specific in nature. Consequently, demonstration of growth of very specific skills was more affected by the specificity of the test items. For example, a student may have sizably increased his vocabulary, but if the particular words, roots, prefixes, or suffixes he learned were not the same as those on the test, growth was not likely to be discernable from the test score. A similar situation exists in the measurement of other specific skills. In short, failure to show growth may have resulted from the very real possibility that the test did not measure what the student had learned.

These do not by any means encompass all the reasons for failure to demonstrate growth on a test. They are merely examples of the many diverse factors which can effect a gap between a testee's knowledge and a score provided by an instrument of measurement.

As during the preconference, children validated their results personally as the reading laboratory director and assisting classroom teacher helped students identify, explore, and understand any possible factors which might have influenced their test scores. Scores assumed heightened significance for children during the postconference because each child had several weeks of hard effort invested in the outcome.

Exploring ways to continue reading practice

As the laboratory experience came to a close, it seemed appropriate to discuss the future. So that children did not acquire an attitude that reading development is coterminuous with the reading laboratory, special attention was given to exploring ways to continue self-development--reinforcing already acquired habits and practices and exploring new options.

Generally, children were eager to see their posttest scores, pleased with their results, and sad that scheduled reading laboratory activities were over.

Although numerous approaches exist for guiding such exploration, the approach used in this study was guided by four primary strategies:

1. Listening for positive comments by the student regarding progress in a particular area and/or statements indicating a desire to excel. Further;

2. Reacting positively to the student's comments;

3. Asking open-ended questions which allow the student to explore new situations in which he can practice particular reading skills;

4. Suggesting, as possibilities, new situations and techniques to practice independently, thus continuing to develop skills.

RESULTS

The examination of the reading laboratory program for upper elementary pupils extended over a two-year period. Each year a different concern was examined. During the 1975-1976 school year, differences in achievement between students who had the laboratory experience and those who did not have the laboratory experience were investigated. The following year (1976-1977), differences in achievement of four types of laboratory exposures were analyzed. The results and conclusions of the 1975-1976 study will be presented first, followed by the results and conclusion of the 1976-1977 study.

The 1975 - 1976 Study Results

The data were examined for differences between an experimental group (reading laboratory exposure) and a control group (no reading laboratory exposure). The two groups consisted of students who were nine and ten years of age. Both groups were administered the Stanford Diagnostic Reading Test three times during five-week intervals. The first test was administered during the first week of the reading laboratory; the second administration took place five weeks later; and the third administration took place during the sixth and final week of the reading laboratory experience.

It should be noted that a diagnostic test was used to measure gains; the recommended procedure is to use an achievement test. During the second study in 1976-1977, an achievement test was used.

Data Analysis

Multivariate analysis of variance (MANOVA) was used to determine differences between the experimental group and a control group on seven reading measures (reading comprehension, vocabulary, syllabication, blending, sound discrimination, reading rate, and comprehension rate) of the Stanford Diagnostic Reading Test (SDRT). Two levels of each measure were administered to both groups contingent upon classroom teachers' informal estimate of each pupil's reading ability. The lower reading level students were administered Level I, Form W of the SDRT and the better readers, Level II, Form W of the SDRT. The seven reading scores were the dependent variables; the type of treatment was the independent variable.

MANOVA Results

Three hypotheses were investigated. The first sought to determine if there was a difference in change scores for the experimental group between the first and second and the second and third administrations. The analysis of Level I of the reading measures revealed no overall differences. The individual analysis of each of the seven reading measures showed that the experimental group had a significantly higher gain in reading comprehension from administration one to two than from two to three. F-ratios and means are presented in Tables 1 and 2, respectively.

For Level II, there was a significant difference ($p \leq 0.05$) in change scores as reported in Table 1. Significant differences were found overall and on the measures of reading comprehension and comprehension rate. As presented in Table 2, the mean changes show that the experimental group had higher mean changes on six of the seven reading measures between the second and third administration rather than between the first and second administrations. This shows that the experimental group did better overall between the middle and last testing. The resulting significance regarding reading comprehension was due to the higher gains between the second and third testing also. Regarding comprehension rate, the significance was due to the higher gains between the first and second administration.

The second hypothesis compared the change scores of the experimental and control groups for the first and second administrations. MANOVA results are presented in Table 1. No significant differences were found for Level I of the SDRT. For Level II of the SDRT, there were no overall significant differences; although when each measure was viewed individually, the control group had a significantly higher gain on reading rate than did the experimental group.

Hypothesis three compared the change scores of the experimental and control groups for the second and third administrations. No differences were found for Level I. The analysis of Level II demonstrated that the experimental group had significantly higher gains than the control group, both overall and on the measures of sound discrimination and reading rate. See Tables 1 and 2.

Summary of MANOVA results

No null hypothesis was rejected for Level I of the reading measures of the Stanford Diagnostic Reading Test. For Level II of the SDRT, null hypotheses one and three were rejected. Hypothesis one was rejected in favor of the experimental group's gain between the second and third administrations which was larger than the gain between the first and second administrations. The third hypothesis was rejected because the experimental group had significantly higher gains than the control group when considering the gains from the second to the third administrations.

Table 1

Multivariate and Univariate F values and Degrees of Freedom for the Three Null Hypotheses by Reading Measure Level

Source of Variance	Level I		Level II	
	F value	df	F value	df
Null Hypothesis 1:				
Multivariate	0.3612	1,18	6.0309*	1,35
Univariate:				
1. Reading Comprehension	5.1472*	1,18	10.3514*	1,35
2. Vocabulary	0.1167	1,18	0.1921	1,35
3. Syllabication	1.4737	1,18	0.0031	1,35
4. Blending	0.7397	1,18	3.0762	1,35
5. Sound Discrimination	2.3219	1,18	0.1160	1,35
6. Reading Rate	0.2851	1,18	3.7663	1,35
7. Comprehension Rate	1.7991	1,18	12.2300*	1,35
Null Hypothesis 2:				
Multivariate	0.6880	7,32	0.9684	7,37
Univariate:				
1. Reading Comprehension	2.3372	1,38	0.6921	1,43
2. Vocabulary	0.7660	1,38	0.2197	1,43
3. Syllabication	2.0556	1,38	0.3885	1,43
4. Blending	0.4498	1,38	0.6567	1,43
5. Sound Discrimination	0.2521	1,38	0.0861	1,43
6. Reading Rate	0.2447	1,38	5.3559*	1,43
7. Comprehension Rate	1.1537	1,38	0.5808	1,43
Null Hypothesis 3:				
Multivariate	1.3670	7,32	3.4461*	7,37
Univariate:				
1. Reading Comprehension	0.1191	1,38	1.6558	1,43
2. Vocabulary	0.5222	1,38	1.4741	1,43
3. Syllabication	0.6821	1,38	1.9259	1,43
4. Blending	2.1679	1,38	3.2079	1,43
5. Sound Discrimination	0.5448	1,38	5.2407*	1,43
6. Reading Rate	2.2440	1,38	8.3008*	1,43
7. Comprehension Rate	2.7405	1,38	0.9826	1,43

* $p \leq .05$

Table 2

Means and n's of the Change (Difference) Scores of the Seven Reading Means for the Three Null Hypotheses by Experimental and Control Groups and by Level

Groups	n	Means						
		Reading Comprehension	Vocabulary	Syllabication	Blending	Sound Discrimination	Reading Rate	Comprehension Rate
Null Hypothesis 1								
Level I: Experimental Group								
Test Time 2 — *Test Time 1	19	2.789	0.947	1.684	0.421	-0.789	16.579	-0.158
Test Time 3 — Test Time 2	19	-0.211	0.368	-0.105	1.368	2.789	27.632	1.895
Level II: Experimental Group								
Test Time 2 — Test Time 1	36	-0.722	0.944	1.056	0.694	0.750	29.000	2.556
Test Time 3 — Test Time 2	36	4.833	1.806	1.111	3.306	1.194	56.528	0.250
Null Hypothesis 2								
Level I: Experimental Group								
Test Time 2 — Test Time 1	19	2.789	0.947	1.684	0.421	-0.789	16.579	-0.158
Level I: Control Group								
Test Time 2 — Test Time 1	21	1.143	-0.048	-0.048	-0.286	0.000	24.667	1.048
Level II: Experimental Group								
Test Time 2 — Test Time 1	36	-0.722	0.944	1.056	0.694	0.750	29.000	2.556
Level II: Control Group								
Test Time 2 — Test Time 1	9	-2.667	2.000	0.111	2.444	1.222	80.667	1.778
Null Hypothesis 3								
Level I: Experimental Group								
Test Time 3 — Test Time 2	19	-0.211	0.368	-0.105	1.368	2.789	27.632	1.895
Level I: Control Group								
Test Time 3 — Test Time 2	21	-0.524	1.286	0.810	2.714	1.571	56.667	0.238
Level II: Experimental Group								
Test Time 3 — Test Time 2	36	4.833	1.806	1.111	3.306	1.194	56.528	0.250
Level II: Control Group								
Test Time 3 — Test Time 2	9	2.000	-0.667	3.000	0.556	-3.889	3.889	-0.667

*The dash represents a minus sign signifying the difference between the scores at the two testing times.

In conclusion, no differences were found on Level I of the SDRT between the experimental and control groups and between different test administrations of the experimental groups. On Level II, the experimental group was found to do better on the reading measures of the SDRT than did the control groups; the experimental group was also found to have greater gains on the last two test administrations than did the control group. In addition, the experimental group was found to have greater gains on the SDRT during the last five weeks of the reading laboratory experience than it had during the first five weeks.

The 1976 - 1977 Study Results

The 1976-1977 data were examined in order to determine differences in effects of four approaches to the reading laboratory. Differences were based on the change in student reading achievement demonstrated in each of the approaches, i.e., treatments. The four treatments were distinguishable according to the period of time the student was present in the reading laboratory. As in the 1975-1976 study, all students were nine- and ten-year-olds.

Data Analysis

A four way factorial design was employed, using analysis of variance (ANOVA). The four independent factors were the treatment, grade, sex, and achievement level. There were four types of treatment. The first met five times a week for six weeks; the second, three times a week for six weeks; the third, three times a week for twelve weeks; and the fourth, three times a week for two six-week periods, one during the fall and one during the spring, with pre- and posttesting taking place in the spring. The two grades involved were grades four and five; classrooms were multigraded and contained both fourth and fifth grade students. The three achievement levels were high, middle, and low, classified upon recommendations of the classroom teacher.

In light of the independent variables, five dependent variables were investigated. These were the standard gain scores of the three subscores of vocabulary, comprehension, and word study skills on the Reading Section of the Stanford Achievement Test (SAT) and the rate and story comprehension of the Diagnostic Reading Test. In addition, grade equivalent scores of the Reading Section of the SAT were compared to national norms utilizing a z test. In all cases significance was determined for $p \leq 0.05$.

ANOVA Results

Five null hypotheses were investigated. All five attempted to show that no differences existed among the four independent variables (treatment, grade, sex, and achievement level) on a particular dependent variable. Hypothesis one examined differences among the independent variables on the SAT variable of vocabulary, hypothesis two on the SAT variable of comprehension, hypothesis three on the SAT variable of word study skills, hypothesis four on the Diagnostic variable of rate, and hypothesis five on the Diagnostic variable of story comprehension.

The four-way ANOVA resulted in significant differences on four (vocabulary, comprehension, word study skills, and rate) of the five hypotheses investigated. No significant differences were found on the dependent variable of story comprehension. F-ratios and means are presented in Tables 3 and 4, respectively.

For the SAT variable of vocabulary, significant differences in the gains of the three achievement levels resulted. It was found that those with the lowest achievement level had significantly larger gains than did the high or middle level students. In addition to this main effect difference, there was a significant interaction between sex and the treatment types. It was demonstrated that for those in the third type of treatment (those who met three times a week for 12 weeks), males had significantly larger gains than did females.

For the SAT variable of comprehension, there was a main effect difference among the four types of treatment. Those who met for 12 weeks had significantly larger gains than the other three groups. The two groups who met three times a week for six weeks had significantly higher gains than did those who met five times a week for six weeks. In addition, there was a significant interaction between treatment and achievement level. It was found that for those who met for 12 weeks (type 3), middle level achievers had significantly larger gains than did those in the low level of achievement.

For the SAT variable of word study skills, there were no significant differences for the main effects. There were two significant interactions, one a two-way and one a three-way. The two-way interaction was between sex and achievement level. It was found that for achievers, females had significantly larger gains than did males. The three-way interaction was among type of treatment, grade, and achievement level. It was found that for low level achievers in grade five, the students in treatment one (those meeting five times a week for six weeks) had significantly higher gains than any of the other three treatment groups.

Table 3

F Values and Degrees of Freedom for the Five Null Hypotheses
For Each Reading Measure of the 1976 - 1977 Study

Source of Variance	H_1 Vocabulary		H_2 Comprehension		H_3 Word Study Skills		H_4 Rate		H_5 Story Comprehension	
	F	df	F	df	F	df	F	df	F	df
Main Effects										
Treatment (T)	0.47	3	7.44*	3	0.41	3	3.69*	3	0.40	3
Sex (S)	1.49	1	0.05	1	0.69	1	0.04	1	3.14	1
Grade (G)	2.00	1	0.57	1	0.77	1	0.36	1	1.66	1
Achievement Level (L)	3.63*	2	1.39	2	0.45	2	2.72	2	0.59	2
Interactions										
T x S	3.22*	3	1.35	3	0.92	3	0.56	3	0.32	3
T x G	2.62	3	0.42	3	2.32	3	0.37	3	1.39	3
T x L	0.14	5	3.13*	5	0.44	5	0.82	5	0.61	5
S x G	2.36	1	0.05	1	0.23	1	0.24	1	1.30	1
S x L	0.00	2	0.03	2	3.29*	2	0.28	2	0.71	2
G x L	0.11	2	2.76	2	0.46	2	1.51	2	0.47	2
T x S x G	1.97	3	0.68	3	1.73	3	3.71*	3	1.52	3
T x S x L	0.88	4	1.30	4	1.38	3	1.91	4	1.64	4
T x G x L	1.10	4	0.77	4	4.87*	4	1.44	4	0.62	4
S x G x L	1.94	2	0.36	2	0.15	2	1.18	2	0.73	1
T x S x G x L	0.00	1	1.58	1	0.26	1	--	0	2.07	1
Error	--	68	--	69	--	68	--	65	--	67

Table 4

Means and n's of the Change (Difference) Raw Scores of the Five Reading Means for the Five Null Hypotheses

Groups	n	Means				
		Vocabulary	Comprehension	Word Study Skills	Rate	Story Comprehension
Total Treatment Group	107	1.243	2.042	1.905	16.806	0.262
Treatment:						
One	26	0.660	1.061	1.531	6.779	0.080
Two	25	1.915	1.855	2.385	18.016	0.478
Three	28	1.018	2.919	1.680	17.127	0.131
Four	28	1.389	2.244	2.084	25.430	0.384
Sex:						
Female	52	1.049	2.058	2.315	16.319	0.116
Male	55	1.437	2.027	1.518	17.256	0.397
Treatment:						
One Female	14	0.893	1.543	2.030	8.853	0.020
One Male	12	0.362	0.497	0.948	4.359	0.155
Two Female	12	2.576	2.701	3.790	21.532	0.181
Two Male	13	1.304	1.074	1.304	14.793	0.729
Three Female	13	0.085	2.888	1.239	15.961	-0.034
Three Male	15	1.952	2.947	2.122	18.060	0.285
Four Female	13	0.844	1.189	2.647	20.610	0.363
Four Male	15	1.862	3.158	1.596	29.562	0.399
Grade:						
Four	48	1.737	1.847	2.365	18.771	0.133
Five	59	0.835	2.201	1.518	15.254	0.356
Treatment One:						
Grade Four	12	0.142	0.592	0.545	6.088	-0.207
Grade Five	14	1.137	1.462	2.376	7.371	0.305
Treatment Two:						
Grade Four	12	2.036	1.205	2.493	24.682	0.544
Grade Five	13	1.803	2.455	2.267	12.888	0.422
Treatment Three:						
Grade Four	12	1.485	2.891	2.515	16.852	0.178
Grade Five	16	0.668	2.941	1.054	17.347	0.098
Treatment Four:						
Grade Four	12	3.283	2.701	3.906	29.329	0.000
Grade Five	16	-0.031	1.901	0.717	22.571	0.623

Table 4 (Continued)

Groups	n	Means				
		Vocabulary	Comprehension	Word Study Skills	Rate	Story Comprehension
Achievement:						
Level One	19	0.761	3.089	2.774	19.507	0.234
Level Two	60	0.883	1.958	2.002	18.616	0.166
Level Three	28	2.330	1.513	1.171	10.591	0.479
Treatment One:						
Level One	1	0.000	2.843	-1.706	- 7.391	-0.284
Level Two	20	0.314	0.881	1.734	7.405	0.120
Level Three	5	2.104	1.421	1.364	7.107	0.000
Treatment Two						
Level One	6	0.748	3.407	3.740	14.660	0.083
Level Two	12	1.953	1.247	2.535	24.524	0.363
Level Three	7	2.849	1.567	1.353	10.186	0.997
Treatment Three:						
Level One	0	--	--	--	--	--
Level Two	19	0.825	3.890	1.713	20.959	0.143
Level Three	9	1.426	0.871	1.611	6.178	0.106
Treatment Four:						
Level One	12	0.831	2.950	2.826	23.768	0.363
Level Two	9	0.776	1.219	2.493	32.660	0.062
Level Three	7	3.134	2.351	0.285	19.114	0.784

For the Diagnostic Reading Test variable of rate, there was a significant main effect and a significant three-way interaction. The significant main effect existed among the four treatments. Those who were in treatment four (the students who met three times a week for two six-week periods) had significantly larger gains than did the other three treatments. Those in treatments two and three (students meeting for three times a week and those meeting three times a week for twelve weeks) had significantly larger gains than did those who met five times a week for six weeks. Regarding the three-way interaction of treatment, grade, and sex, it was found that for students in grade four who met three times a week for twelve consecutive weeks, the males had significantly larger gains than did females.

As stated above, there were no significant differences for the dependent variable of story comprehension.

Summary of ANOVA results

In summary, the important results appear to be the following:

1. The low achievers had the largest gains in vocabulary.
2. Males who attended reading lab for twelve consecutive weeks had larger gains in vocabulary than did females.
3. Regarding comprehension, those meeting for twelve consecutive weeks had the largest gains and, within this group, middle achievers did better than low achievers.
4. Regarding word study skills, low achieving females had greater gains than low achieving males.
5. The Diagnostic rate gains were best made in the group that met for one period of six weeks for three times a week.

Grade Equivalent Results

Grade equivalent results were compared to national norms of a one month gain in the grade equivalent score. Using a z test with the standard deviation of the sample in question, significant grade equivalent gain scores were determined. Table 5 presents the results of the analysis.

Without separating the sample into any of the categories of treatment, achievement level, sex, and grade, the students in the present study had gains significantly larger than the expected norm

Table 5

Means, n's, and Standard Deviations of the Change (Difference) in Grade Equivalence Scores per Month of the Reading Section of the SAT

Group	n	Vocabulary		Comprehension		Word Study Skills	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Total Treatment Group	107	1.25	2.60	1.78*	3.88	1.69*	3.44
Treatment:							
One	26	0.97	2.30	1.21	2.76	1.32	2.44
Two	25	1.52	2.94	1.07	6.66	1.73*	4.39
Three	28	1.09	1.79	2.96*	2.14	1.33	2.19
Four	28	1.44	3.28	1.67*	3.01	2.37*	4.42
Female	52	1.13	2.69	2.27*	3.68	2.04*	3.35
Male	55	1.37	2.53	1.30	4.03	1.35	3.53
Treatment:							
One: females	14	1.32	1.97	1.87*	2.45	1.87*	2.69
One: males	12	0.52	2.70	0.45	2.99	0.69	2.04
Two: females	12	2.08*	3.14	3.26*	6.38	3.29*	4.57
Two: males	13	0.78	2.65	-1.13	6.47	0.32	3.88
Three: females	13	0.12	1.83	2.76*	1.90	0.70	1.56
Three: males	15	2.07*	1.12	3.14*	2.39	1.97*	2.57
Four: females	13	1.15	3.50	1.38	3.21	2.72*	4.07
Four: males	15	1.70*	3.18	1.93*	2.93	2.06*	4.82
Achievers:							
High	19	1.11	3.77	2.23*	3.39	3.77*	5.23
Middle	60	1.10	2.56	1.95*	4.63	1.62	3.14
Low	28	1.65*	1.70	1.09	1.88	0.63	2.13
Treatment One:							
High Achievers	1	0.00	0.00	2.27	0.00	-0.57	0.00
Middle Achievers	20	0.90	2.62	1.28	3.14	1.55	2.53
Low Achievers	5	1.42	0.45	0.74	0.32	0.97	2.53
Treatment Two:							
High Achievers	6	1.12	2.65	2.69*	4.56	3.82*	5.78
Middle Achievers	12	1.54	3.61	0.27	8.82	1.79*	4.83
Low Achievers	7	1.75*	2.06	1.16	3.16	0.58	2.83
Treatment Three:							
High Achievers	0	--	--	--	--	--	--
Middle Achievers	19	1.04	1.90	3.88*	1.87	1.54	2.62
Low Achievers	9	1.21	1.64	1.03	1.19	0.90	0.64

Table 5 (Continued)

Group:	n	Vocabulary $\bar{X}$	Vocabulary SD	Comprehension $\bar{X}$	Comprehension SD	Word Study Skills $\bar{X}$	Word Study Skills SD
Treatment Four:							
High Achievers	12	1.21	4.31	2.04*	3.16	4.11*	5.43
Middle Achievers	9	1.11	2.56	1.44	3.59	1.83*	3.12
Low Achievers	7	2.28*	2.13	1.35	2.19	0.07	2.86
Grade Four	48	1.75*	2.64	1.63	3.98	1.95*	3.76
Grade Five	59	0.83	2.51	1.90*	3.82	1.48	3.17
Treatment One:							
Grade Four	12	0.07	2.24	0.17	2.69	0.50	1.97
Grade Five	14	1.79*	2.11	2.11*	2.57	2.03*	2.64
Treatment Two:							
Grade Four	12	1.80*	3.17	1.90*	6.96	1.90*	5.32
Grade Five	13	1.27	2.85	0.23	6.57	1.55	3.35
Treatment Three:							
Grade Four	12	1.62	1.24	2.79*	2.32	2.20*	2.20
Grade Five	16	0.70	2.06	3.09*	2.07	0.68	2.00
Treatment Four:							
Grade Four	12	3.53*	2.68	1.66*	2.41	3.20*	4.55
Grade Five	16	-0.12	2.84	1.68*	3.47	1.75*	4.35

*Indicates significance for $p \leq 0.05$ for a value greater than the expected norm value of a 1.00 month gain.

gains for the variables of comprehension and word study skills. When considering the four types of treatment, significant larger gains again existed for comprehension and word study skills for those who met for one six-week period three times a week. Those who met for twelve consecutive weeks had gains significantly larger in comprehension than the expected norm gain, and those who met for two periods of six weeks had gains significantly larger than expected in word study skills. There were no gains significantly smaller than were expected according to national norms.

When considering sex, females had gains significantly larger for the same afore mentioned variables of comprehension and word study skills. Males had gains no different from expected national norms. When considering the four treatments, females had significantly larger gains on all three variables of vocabulary, comprehension, and word study skills for treatment two which met for one six-week period three times a week. Males had the same result on treatment three (twelve consecutive weeks) and treatment four (two periods of six weeks three times a week). It should be noted that males had significantly lower than expected gains on treatment two (the one on which females did best) for comprehension and word study skills.

When considering achievement level, the high achievers had significantly larger than expected gains in comprehension and word study skills, the middle achievers in comprehension, and the low achievers in vocabulary. When considering the four treatments, the high achievers had consistent results on comprehension and word study skills on all treatments. The only inconsistent result was on treatment one (five times a week for six weeks) where the higher achievers had gains significantly lower than expected for word study skills and also vocabulary. Middle achievers had significantly larger gains on word study skills for treatment two (one six-week period three times a week) and treatment four (two six-week periods three times a week). Low achievers had consistent results by treatment and overall. There were significantly larger gains on vocabulary for treatment two (one six-week period three times a week) and treatment four (two six-week periods three times a week).

Regarding grade, significantly larger gains existed for grade four on vocabulary and word study and for grade five on comprehension. When considering treatment, grade four had significantly larger gains on all three variables of vocabulary, comprehension, and word study skills for treatment two (one six-week period three times a week) and grade five for treatment one (one six-week period five times a week).

Summary of grade equivalent results

In general, significantly greater gains than those expected by national norms occurred with greater regularity for comprehension and word study skills than for vocabulary. Treatment two (one six-week period three times a week) most frequently demonstrated gains significantly larger than national norms.

APPENDIXES

APPENDIX A

STANFORD ACHIEVEMENT TEST — Level: Primary III _____ Intermediate I _____

INDIVIDUAL STUDENT PROFILE — Form: Pretest _____ Posttest _____
DRT: Pretest _____ Posttest _____

Name _____
last first initial

Male _____ Female _____ Grade _____ Examiner _____

School _____ Date of Testing _____
year month day

City or Town _____ Date of Birth _____
year month day

State _____ Age _____
years months

TEST	Test 1	Test 2	Test 3	DRT	DRT
	Vocab.	Reading Comp.	Word Study Skills	Rate	Comp.
Raw Score					
STANINE	9	9	9	9	9
	8	8	8	8	8
	7	7	7	7	7
	6	6	6	6	6
	5	5	5	5	5
	4	4	4	4	4
	3	3	3	3	3
	2	2	2	2	2
	1	1	1	1	1

GOALS:

APPENDIX B

DATE	TEACHER COMMENT	STUDENT COMMENT

APPENDIX C

FURNISHING THE ELEMENTARY READING LABORATORY

Furniture, Equipment, Miscellaneous Supplies

Furniture

20 carrels
35 chairs
2 small tables
2 large tables
3 filing cabinets
book shelves (min: 100 feet)
1 paperback book rack
1 magazine display rack
2 pencil sharpeners
1 bulletin board

(optional)
free reading corner
small tables
pillows
rugs
soft chairs
lamps

Equipment

6 EDL controlled readers
10 tape cassettes**
10 headsets
1 Language Master
3 film viewers
2 pacers
2 kitchen timers
2 egg timers
1 stopwatch
1 listening station (optional)
5 Flash-X machines (optional)
1 record player (optional)

* EDL COMBO-8
** with separate mike attachments

Miscellaneous Supplies

felt tip pens, Magic Markers
pencils
crayons
Thermo-fax masters
construction paper
ditto paper
file folders
scissors
paste, glue, rubber cement
stapler & staples
stapler remover
hole punch
wastebaskets
paper clips
rubber bands
rubber stamp (ID)
date stamp
masking tape
library book tape
thumbtacks
acetate sheets; markers

Materials, Publishers, Additional Skills

VOCABULARY

Reading Level	Format*	Material Name & Catalog Number	Price	Publisher	Additional Skills
2-9	wb	Syllabication complete set	21.95	Dexter &	
1-2	wb	Rhyme Time complete set	12.95	Westbrook	
1-9	wb	Reading Homonyms complete set	52.95		
1-2	wb	Picto-cabulary: Basic Word Set A	69.95	Barnell Loft	
3-4	wb	Words to Eat	36.95		
3-4	wb	Words to Wear	36.95		
R-1	wb	Tach X-Word Recognition Book RA-AA	2.10	EDL**	
R-1	c	Flash X Set FX-AA 319501-4	6.50		
2	wb	Tach X-Word Recognition Book BA 319102-7	2.10		
2	c	Flash X-Set FXBA 319502-2	4.75		
3	wb	Tach A Word Recognition Book CA 319103-5	2.10		
3	c	Flash X Set FX-CA 319503-0	4.75		
4	wb	Tach X Word Book DA 319104-3	2.60		
4	c	Flash X Set FX-DA 319504-9	4.00		
4-6	wb, av	Wordcraft 1	74.90	Communacad	
2-3	av	Clue No. 1		Educational	
3-4	av	Clue No. 2		Progress	
4-5	av	Clue No. 3 1-5123	295.00		
5-6	av	Clue No. 4			
6-7	av	Clue No. 5			

*Code to Format: av/k (audio-visual kit), c (cards as for Flash X), cr (controlled reader), f (FIash X), fs (filmstrip), k (kit), l (language master), p (pacer), pb (paperback book), r (record), t (tape), w (worksheet), wb (workbook).

**Purchase these if Tach X equipment is available.

Reading Level	Format*	Material Name & Catalog Number	Price	Publisher	Additional Skills
all	av	Target Green Vocabulary Kit 46201	237.00	Addison	
all	av	Target Blue Structural Analysis 46101		Wesley	
all	av	Target Yellow Phonetic Analysis 46050			
all	av	Target Orange			
all	av	Target Red			
3-8	c	349417-4 Set A Word Analysis Practice	3.90	Harcourt, Brace,	
		349425-5 Set B Word Analysis Practice	3.90	Jovanivich	
		349433-6 Set C Word Analysis Practice	3.90		
1-4	k	3-207700 School House Word Attack Skills Kit	84.65	SRA	
		3-3800 Vocabulary 3	95.25		
1	wb	Reading Homographs A	9.95	Dexter &	
2	wb	Reading Homographs B	9.95	Westbrook	
3	wb	Reading Heteronyms C	9.95		
1	wb	Mastering Multiple Meanings A	9.95		
2-3	wb	Recognizing Word Relationships	9.95		
COMPREHENSION					
1-6	wb	Reading Thinking, Reasoning Series		Steck-Vaughn	
		Workbook	1.26		
		Teacher's Edition	1.56		
	av/k	Thinking Skills Series	66.00	Troll Association	
	wb	Specific Skills Series Complete			
		Specimen Set	72.25	Barnell Loft,	
		Teacher's Guide Key	2.50	Ltd.	

*Code to Format: av/k (audio-visual kit), c (cards as for Flash X), cr (controlled reader), f (Flash X), fs (filmstrip), k (kit), l (language master), p (pacer), pb (paperback book), r (record), t (tape), w (worksheet), wb (workbook).

**Purchase these if Tach X equipment is available.

APPENDIX C (continued)

Reading Level	Format*	Material Name & Catalog Number	Price	Publisher	Additional Skills
4-8	k	Newslab I 35000	75.00	SRA	
4.5-9.5	k	Countries and Cultures 3-5350	68.40		
3.0-8.9	k	Avout Women 3-9700	59.95		
3.0-8.9	k	An American Album 3-9550	79.95		
3.0-5.9	k	Think Lab 3-207740	49.50		
4-8	k	Schoolhouse: Comprehension Patterns 3-207800	84.65		Vocabulary
2-6	k	We Are Black 35280	67.50		Vocabulary
2-8	k	SRA Reading Laboratory IB IIB IIIB IVB	99.95		
2-13	k	Reading for Understanding Jr.	58.30		
4-9	k	Manpower and Natural Resources	67.50		
2.0-2.9	wb	Action Unit Books 1, 2, 3 (8991, 8992, 8993)	1.00	Scholastic	Vocabulary
3.0-3.9	wb	Double Action Unit Books 1, 2 (8862, 8863)	1.00		Vocabulary
2.0-3.9	pb, ws	Action Libraries 1, 1A, 2, 2A, 3, 3A, 4 (2704, 2475, 2713, 2986, 3339, 2999, 3462)	39.50		Vocabulary
3-6	pb, wb	Dimension Spotlight Wide, World Sprint (Speed Reading 1) Chillers & Thrillers	2.25		Vocabulary
2-4	pb, ws	Phoenix Reading Series A B C	35.00	Prentice-Hall	Vocabulary
4-8	pb	Now Age Illustrated Reading Kit #64-0001	64.95	Pendulum Press, Inc.	
pp-3	k	(A) Reading Development Kit 7050	79.50	Addison Wesley	
4-6	k	(B) Reading Development Kit 7109	79.50		
2-9	pb	Kaleidoscope Reader (1-8) 40851, 3, 5, 7, 9, 61, 63, 65	2.97		Vocabulary
		Kaleidoscope Reader (1-8) 40852, 4, 6, 8, 60, 62, 64, 66	3.24		Vocabulary

*Code to Format: av/k (audio-visual kit), c (cards as for Flash X), cr (controlled reader), f (Flash X), fs (filmstrip), k (kit), l (language master), p (pacer), pb (paperback book), r (record), t (tape), w (worksheet), wb (workbook).

**Purchase these if Tach X equipment is available.

Reading Level	Format*	Material Name & Catalog Number	Price	Publisher	Additional Skills
7-9	pb, t	Readers Digest Level 7 #371 #770 Audio Lessons	 1.50 39.60	RD	Study Skills
STUDY SKILLS					
1-9	wb	Using a Table of Contents complete set Learning to Alphabetize & Using Guide Words complete set	9.95 26.95	Barnell Loft	
4-8	k	Research Lab 3-7600	90.50	SRA	
4-6	pb	Countdown Study Skills I	2.25	Scholastic	
RATE					
1-13	fs, ct, wb	Controlled Reader Filmstrip Series: C 1-50, D, DD, E, EE, F, FF, G, H, HG. Study Guides (4 to each series)	 2.25	EDL	Comprehension Vocabulary

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